

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022691**Date Inspected:** 12-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspectors: Mr. Geng Wei, Mr. Sun Tian Tian

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder stencil Mr. Zhou Songsong used shielded metal arc welding procedure specification WPS-B-P-2213-B-U2-FCM-1 to make OBG segment 14E weld SEG3060-001-338. This QA Inspector measured a welding current of approximately 170 amps, Mr. Zhou Songsong appeared to be certified to make this weld and the base material had been preheated with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhao Guanglin, stencil 044779 used shielded metal arc welding procedure WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019L-081. This QA Inspector observed a welding current of approximately 175 amps the base materials were preheated with electrical heaters and Mr. Zhao Guanglin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Hu Feng Jiang, stencil 067877 used flux cored welding procedure WPS-B-T-2232-ESAB to make OBG segment 14E weld SEG3019D-1-010. This QA Inspector measured a welding current of approximately 280 amps, 26.0 volts, Mr. Hu Feng Jiang appeared to be certified to make this weld and the base material had been preheated with electric heaters. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhu Jibo, stencil 055564 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 14E welds SEG3019X-004, 005 and 006. This QA Inspector measured a welding current of approximately 270 amps, 25.0 volts, the base materials were preheated with a torch and Mr. Zhu Jibo appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Linjiang stencil 051356 used flux cored welding procedure WPS-B-TC-2233-ESAB to make OBG segment 14E weld DP3160-001-010. This QA Inspector observed a welding current of approximately 225 amps, 26.0 volts and Mr. Wang Linjiang appeared to be certified to make his weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yuan Wensong, stencil 055491 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 14E welds SEG3019D-1-007 and 004. This QA Inspector measured a welding current of approximately 225 amps and 24.0 volts. This QA Inspector observed Mr. Yuan Wensong appeared to be certified to make this weld and the base materials had been heated with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Junping, stencil 501946 used shielded metal arc welding procedure WPS-B-P-2213-B-U2-FCM-1 to make OBG segment 14E weld SEG3019H-050. This QA Inspector observed a welding current of approximately 150 amps, the base materials were heated with a torch and Mr. Yang Junping appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Changfa, stencil 058102 used shielded metal arc welding procedure specification WPS-B-P-2212-TC-U4B-FCM-1 to make repairs of OBG segment 14E weld SEG3019BB-001. ZPMC QC informed this QA Inspector that weld repair document B-WR-20480 documents this weld had been ultrasonically rejected. This QA Inspector observed a welding current of approximately 170 amps, the base material had been preheated with a torch and Mr. Wang Changfa appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Jinjiu stencil 043661 used shielded metal arc welding procedure WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 14E weld DP3167-001-241. This QA Inspector observed a welding current of approximately 180 amps the base materials were preheated with electrical heaters and Mr. Wang Jinjiu appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 066002 used shielded metal arc welding procedure specification

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WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14W weld SEG3020U-581. This QA Inspector observed a welding current of approximately 190 amps. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Feng Changdou, stencil 067572 used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14W weld SEG3020U-581. This QA Inspector observed a welding current of approximately 180 amps and Mr. Feng Changdou appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Hongjun, stencil 067609 used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14W weld SEG3020U-581. This QA Inspector observed a welding current of approximately 180 amps and Mr. Chen Hongjun appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Hue Junrong, stencil 201215 used flux cored welding procedure WPS-B-T-2232-ESAB to make OBG segment 14W weld TR3027-TR3-001-011. This QA Inspector measured a welding current of approximately 260 amps and 26.5 volts. Ms. Hue Junrong appeared to be certified to make this weld and the base materials appeared to have been preheated with electric heaters prior to welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Jian Junlin, stencil 067876 used flux cored welding procedure WPS-B-T-2232-ESAB to make OBG segment 14W weld TR3027-TR1-001-011. This QA Inspector observed a welding current of approximately 260 amps and 25.0 volts and Mr. Jian Junlin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC Mr. Li Shoufu, stencil 066674 used flux cored welding procedure WPS-B-T-2232-ESAB to make OBG segment 14W weld TR3027-TR1-001-011. This QA Inspector observed a welding current of approximately 290 amps and 26.0 volts and Mr. Li Shoufu appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Du Henghua, stencil 037779 used shielded metal arc welding procedure specification WPS-B-P-2214-T-U4B-FCM-1 to make OBG segment 14W weld SEG3020Z-006. This QA Inspector observed a welding current of approximately 150 amps and Mr. Du Henghua appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer
